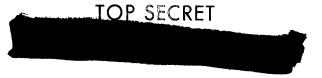
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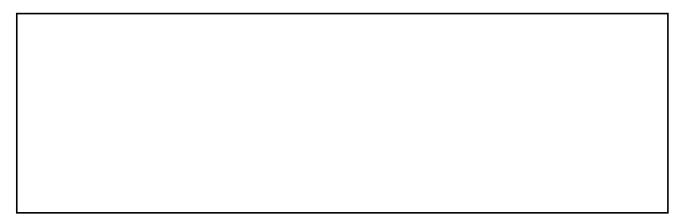
June 1965

PHOTOGRAPHIC INTERPRETATION REPORT

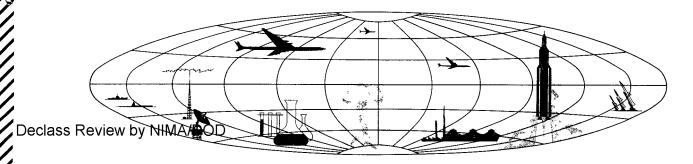
MAKAT FIELD LAUNCH COMPLEX, USSR







NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



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GROUP 1 Excluded from automatic downgrading and declassification

Nizhniy Tagil O'Yoshkar Cheboksary Rainn Kuluhushesskoye Jodahr Kuluhushesskoye	
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FIGURE 1. LOCATION OF MAKAT FIELD LAUNCH COMPLEX, USSR.

FIGURE 2. MAKAT SUPPORT BASE AND AIRFIELD.

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RIVER AIRFIELD 3,700' x 105' 3,735' × 130' **ELECTRONICS** SAGIZ FIRST OBSERVED 25X1D RADAR TRACKING -SUPPORT **FACILITY** RADAR BASE 25X1D HF ANTENNA INTERFEROMETER MOTOR POOL (1,075 DIAM 2 HF ANTENNAS Road Trail/scar Fence Building Buried tank Vehicles/equipment 1000 1000 FEET (APPROXIMATE)

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FIGURE 3. LAYOUT OF MAKAT SUPPORT BASE AND AIRFIELD.

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	The learner facilities and 11		
	The launch facilities probably were in use	fair-quality photography. Within the Launch	
	at this time, although only the possible east	Area scarring could be seen leading north to	
25X1D	instrumentation area, launch point, and missile-	the area of the possible north instrumentation	8
20/10	checkout area were cleared of snow and active.	area. Two unidentified objects were faintly visi-	•
25X1D	Makat was seen again in	ble on the launch point.	
	when it was completely covered by fair-	In the Support Base the only change of any	•
	quality photography with a few scattered clouds.	significance is a new building (Figure 3), which	
	Little or no change was noted at the Support Base	is approximately 255 by 25 feet.	
	other than the addition of a probable building near		
	the center of the interferometer. The only sign	Several unidentified, possible vehicles were	ď
	of activity that could be observed was the	located in the motor pool area and in the elec-	
	presence of 2 short rows of vehicles in the motor	tronics area. No other major changes were ob-	
	pool area. A new clearing could be seen im-	served.	
	mediately south of the possible east instrumenta-	The next coverage of the Makat Complex	
	tion area. This clearing was secured by a fire-	was when the facilities	25X1[
	break, as is the missile-checkout area. Along,	were completely covered on good-quality photog-	
05V4D	unidentified scar could be seen just north of the	raphy. In the interferometer area 2 buildings,	
25X1D	launch point.	each approximately 55 by 20 feet, and oriented on	
	The next coverage of Makat was in late	an angle of were observed for the	25X1[
	when there was no	first time. In addition to these 2 buildings, there	
	apparent change in the facilities. The Launch	were 9 interferometer elements, each of which	
	Area was completely covered and the Support	measures 10 feet square. Six of these elements	
25X1D	Base and surrounding facilities were 50 percent	are in a line radiating from the center of the in-	
-0/(10	covered on fair-quality photography.	terferometer and oriented on a clockwise angle of	
	The Makat Complex was seen times in	140 degrees from the 2 buildings. The other 3	
	when	elements are in the same configuration as the	
25X1D	the complex was covered by extremely poor-	first 6 elements and oriented 130 degrees	
	quality photography of small scale and obliquity.	counterclockwise from the 2 buildings. The in-	
	There was no apparent change at the Support	terferometer is 1,075 feet in diameter.	
	Base, with no activity observed. The clearing		
05V4D	at the possible east instrumentation area prob-	When seen in the	25X1[
25X1D	ably was being relocated to a position immedi-	east-west runway of the Makat Airfield appeared	
25V4D	ately north of its present location, in a clearing	to be the only active runway. The north-south	
25X1D	adjacent to the main road from the Support Base.	runway had the appearance of being grown over	,
	, was the second coverage	with vegetation and was poorly defined at the	
	On this coverage the Support Base was	southern end. No aircraft were observed in the	
	cloud covered and the Launch Area covered with	vicinity of the airfield.	•
	scattered clouds on fair-quality photography. No	No significant activity or changes were	
25X1D	activity or changes in the facilities were ob-	visible at the housing and support area.	
	served.	The Launch Area had no visible sign of	
25X1D	Makat was next seen in	activity. However, a possible tent was observed	
	, when it was completely covered on	on the launch point.	
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25X1D	COVERAGE	general subareas, the first being a small radar tracking facility consisting of 2 radar mounds	
25X1D 	The first mission of was accomplished with missions	(1 occupied) and 11 unidentified related vehicles/ pieces of equipment. The second subarea con-	
,25X1D	to follow that year. The entire complex was covered on very good quality, clear photography. There was no significant change in the Support Base facilities. This mission did reveal the	sists of 7 probable buildings and 35 to 40 unidentified vehicles/pieces of equipment. In addition to this facility there are 2 HF communications horizontal dipole antennas 1 nm south-	
25X1D	following details. The motor pool is probably fenced and is surrounded by a firebreak. Within the motor pool are 2 large, and possibly 2 or 3	west of the housing and support area and a similar one to the southeast. These 3 antennas are oriented on azimuths of approximately	25X ²
25X1D	smaller, buried storage tanks. There are 2 probable vehicle maintenance buildings, approximately 110 by 35 feet and an unidentified building approximately 45 feet	When seen on there was a dark, possibly burned, area in the missile-	25X 25X
	square, and 4 smaller unidentified buildings. There were approximately 45 to 50 unidentified vehicles parked within the motor pool, which is an average vehicular count for the installation.	checkout area. There also were 4 possible vehicles and a tent. The possible north instrumentation area and the unidentified area, southeast, are completely surrounded by firebreaks. Makat was next seen in	25X ⁻
	The housing and support area (Figures 2 and 3) is approximately 615 feet north of the motor pool and consists of 18 approximately 40- by 35-foot single-story, probable living quarters; 1 ap-	when it was completely covered by clear photography. A possible tent and 2 unidentified vehicles could be seen at the possible east instrumentation area. A rectangular, prob-	25X
25X1D	proximately 255 by 25 feet; 3 approximately 155 by 45 feet; 3 approximately 145 by 45 feet; 1 approximately 140 by 35 feet; 1 approximately	able tent and 1 unidentified vehicle/piece of equipment were observed on the launch point. Two unidentified objects could be seen in the	
25X1D	6 approximately 95 by 25 feet unidentified single-story buildings; 2 L-shaped buildings; 2 probable messhalls; and 14 additional buildings of varying sizes. Approximately 7 unidentified vehicles were parked in the northwestern portion of the housing and sup-	Two unidentified objects could be seen in the possible north instrumentation area. No activity or change could be observed in the unidentified area or the missile-hold area. The only noticeable change at the Support Base was a building under construction between the housing and support area and the electronics area. There appeared to be an average number of which is	
	port area. This location appears to be an over- flow parking area when a large number of ve- hicles/pieces of equipment are operating in the	peared to be an average number of vehicles in the Support Base motor pool.	-14.
•	hicles/pieces of equipment are operating in the Makat area. A soccer/athletic field and probable rifle range are located immediately north of the housing and support area.	was the next photo coverage which partially covered Makat with extremely oblique, poor-quality photography, which devaluated this photo coverage.	25X ²
	The electronics area is situated approximately 1,300 feet west of, and half way between, the housing and support area and the airfield (Figure 3). This facility consists of 2		25X ⁻

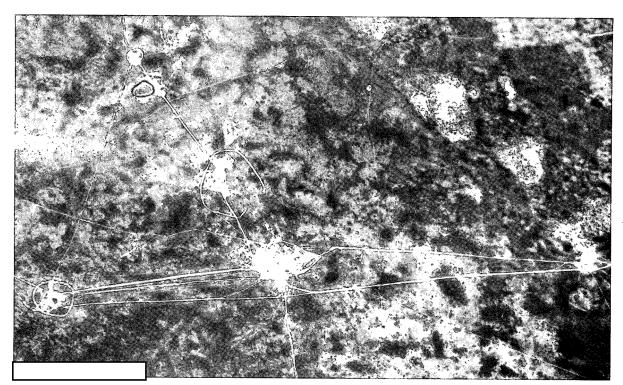
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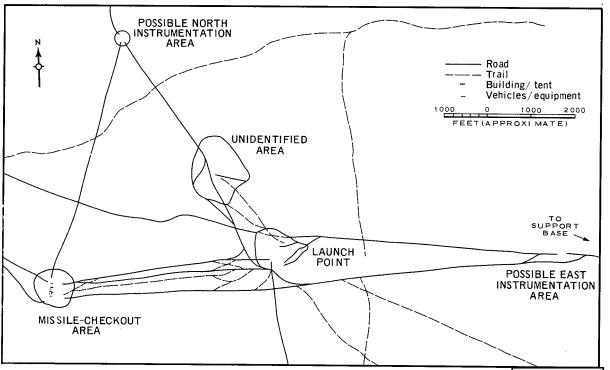


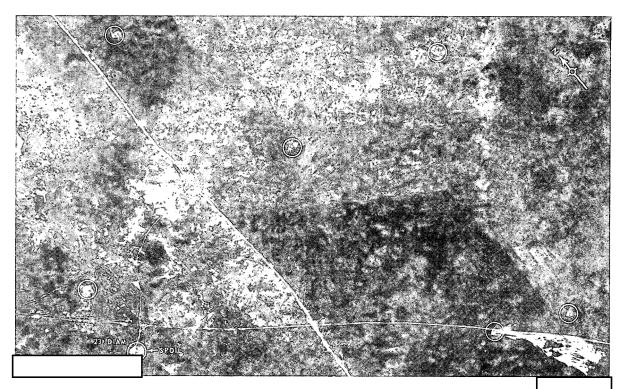
FIGURE 4. MAKAT FIELD LAUNCH POINT AND OTHER AREAS.

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25X1D

FIGURE 5. CRATERS OBSERVED AT MAKAT IMPACT AREA.

25X1D

the next coverage of the complex, when it was observed on good-quality, clear photography with snow cover. There was no significant change in the Support Base; however, activity was evident from tracks and other marks in the snow. The launch point is the central feature and is situated approximately 7 nm northwest of the Support Base (Figure 4). It consists of a cleared area surrounded by a firebreak. Between the firebreak and the clearing are either 3 or 4 vehicle/personnel revetments. Approximately 8,100 feet east of the launch point is a clearing surrounded by a firebreak which has been identified as the possible east instrumentation area and which is approximately 510 feet in diameter. When seen on probable tent or building was observed in the center of the clearing. An area of unidentified

activity is located approximately 2,500 feet north-northwest of the launch point. This area consists of a clearing surrounded by a firebreak. Within this area were 4 unidentified, inline objects, possible tents, all oriented generally east to west, and 3 other unidentified objects.

An area 4,600 feet north-northwest of this unidentified area is a clearing surrounded by a firebreak, which has been identified as the possible north instrumentation area. When seen on this area had only some unidentified scarring and track activity in the snow. This area is approximately 7,100 feet from the launch point and is an average of 400 feet in diameter. A missile-checkout area is located 6,400 feet west of the launch point. This area consists of the normal clearing, with a firebreak. Four unidentified objects can be seen

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25X1D th who have a constant of the constant o	COVERAGE The latest coverage of Makat included in his report was in the complex was completely covered on cod-quality, clear photography. When seen in this mission there was no significant change to the Support Base. Vehicular activity was distensible in the motor pool and on 2 of the roads intering the Support Base. No aircraft were observed at the airfield. Four vehicles/pieces of equipment were observed at the launch point and several others were parked nearby. Also	seen were a probable ready tent, 2 missile transporters, and at least 4 other possible vehicles. Several vehicles/pieces of equipment were observed at the 2 possible instrumentation areas and the unidentified area. An area 10 nm north-northwest of Makat Field Launch Complex, at 48-09N 53-32E, has been identified as a KY/VMTC probable 300-nm impact area. This area contains 16 craters, which measure an average of The projectiles creating these craters probably were on a heading of 95 degrees at the time of impact. Four craters were first observed in	25X1D
25X1D	REFERI	ENCES	
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